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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,914	03/16/2005	Rainer Heller	2002P11020WOUS	9070

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

WU, JUNCHUN

ART UNIT	PAPER NUMBER
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2191

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01/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,914	HELLER ET AL.	
	Examiner	Art Unit	
	Junchun Wu	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21, 24-29, 31-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21, 24-29, 31-36 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on Nov. 2nd, 2007.
2. Claims 21, 24-29, 31, 35, and 36 have been amended.
3. Claims 22-23, 30, 37, and 39-41 have been cancelled.
4. Claims 21, 24-29, 31-36, and 38 are pending.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21, 24-29, and 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong-Insley (US Patent No. 6, 131, 166), in view of Backer et al. (U.S. Pub. No. 20020073094 hereinafter "Backer").

7. Per claims 21 and 29 (currently amended)

Wong-Insley discloses

A storage medium which stores a software system for providing a programming environment to create device-independent functionality among automation devices in an automation system of the type including a plurality of automation devices (col. 3 lines 1-4 "*The invention provides a framework for the development of Java applications (including applets) to manage the power resources and power states of power-manageable computer systems and attached devices.*" &

col.3 lines 35-39 “*The power management framework defines a plurality of standardized, system-independent system power states which may represent the current power status of an entire computer system: full power, power management active, sleep, suspend, and off.*”), the system comprising:

- an automation device-specific adapter for each of the automation devices, each adapter providing a translation of a solution into instructions which can be interpreted by an automation device the software system (col.9 lines 9-16 “*The Java Virtual Machine 222, the porting interface 220, the adapters 216a, 216b, and 216c, the JavaOS 218, and other similar pieces of software on top of the operating systems 212a, 212b, and 212c may, individually or in combination, act as means for translating the machine language of Java applications 232, APIs 226 and 230, and Classes 224 and 228 into a different machine language which is directly executable on the underlying hardware.*”).
- providing encapsulation of specific functions of at least one of the automation devices and providing a base functionality of the one automation device, the editors and compiler (col.9 lines 44-51 “*In a preferred embodiment, the Java™ application-level power management framework comprises a set of standardized, system-independent system power states, a set of standardized device power states which is inherited from an industry standard, a set of well defined power state transitions, and a set of programming interfaces (i.e., APIS) for power management which provide a channel for applications to participate in power management.*” ; In the object-oriented programming like the Java™, all the variables and methods within an object is referred to as encapsulation.).

- providing an automation functionality, in a standard framework for application among automation devices having different command sets for being programmed (col.13 lines 7-11 “...*This transition can be triggered in many ways. For example, the user can press a pre-programmed switch, issue a command, or tailor the power management policy to put the system into Sleep state 404 under some pre-defined circumstances*”).

Becker discloses

- one or more automation engineering editors for generating solutions for one or more of the automation devices ([0004] “*The present invention is based on the object of specifying a way of reusing already created automation solutions in engineering. This object is achieved by a method and a system which is able to use the solutions produced in the course of development of an automation solution which are the same or a similar form from a previously created automation engineering solution, based on the same project or an entirely different one.*”)
- a compiler for translating the solutions into an intermediate language in a runtime framework ([0031] “*Simple creation of reusable solutions-The developer of the automation solution can create a reusable model by means of visual programming*”).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Wong-Insley with the teachings of Becker to include one or more automation engineering editors for generating solutions for one or more of the automation devices and a compiler for translating the solutions into an

intermediate language in a runtime framework in order to provide a way of reusing automation solutions in engineering ([0004]).

8. Per claims 24 (currently amended) and 32 (previously presented)

the rejection of claim 21 is incorporated and Wong-Insley discloses

- the software system is provided for developing control software in the automation system (col.4 lines 63-66 “*As used herein, a programming interface is an application programmer interface or API: a set of routines, protocols, methods, variables, tools, and/or other resources for building software applications.*”).

9. Per claims 25 (currently amended) and 33 (previously presented)

the rejection of claim 21 is incorporated and Wong-Insley discloses

- the software system provides technological objects for automation devices (col.18 lines 14-17 “*There should only be one SystemPowerMonitor object in a system. The constructor of SystemPowerMonitor, which creates the instance of the sole SystemPowerMonitor object and prevents the instantiation of another instance*”).

10. Per claims 26 (currently amended) and 34 (previously presented)

the rejection of claim 21 is incorporated

But Wong-Insley does not disclose

- a memory for storing automation solutions for recurring tasks.

However, Becker discloses

- a memory for storing automation solutions for recurring tasks ([0031] *“Simple creation of reusable solutions-The developer of the automation solution can create a reusable model by means of visual programming.”*).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Wong-Insley with the teachings of Becker to include a memory for storing automation solutions for recurring tasks in order to reduce the maintenance expenditure ([0033]).

11. Per claims 27 and 35 (currently amended)

the rejection of claim 26 is incorporated and Wong-Insley discloses

- adapted for using the Internet and/or an intranet for transmitting data (col.8 lines 6-8 *“Typically, applets are embedded in a Web page, downloaded over the Internet from the server, and run on a client machine.”*).

12. Per claims 28 and 36 (currently amended)

the rejection of claim 21 is incorporated and Wong-Insley discloses

- an automation- specifically designed programming language is used for developing control software for the automation system (col.3 lines 14-16 *“In one embodiment, the invention comprises one or more Java™ programming interfaces or APIs which permit Java™ applications to participate in power management.”*).

13. Per claim 31 (currently amended)

the rejection of claim 29 is incorporated and Wong-Insley discloses

- automation functionality is provided independent of the automation device (col.17 lines 18-22 “*Thus, the interfaces provide means for programmers to develop individual, independent components of an application which allows applications to participate in power management, yet still ensure compatibility between the components.*”).

14. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong-Insley, in view of Becker and further view of Hammond (U.S. Patent No.6, 336,118 B1).

15. Per claim 38

the rejection of claim 36 is incorporated

But both Wong-Insley and Becker do not disclose

- compilers are provided for mapping the intermediate language onto a target platform.

However, Hammond discloses

- compilers are provided for mapping the programming language onto the target platform (col.3 lines 33-36 “*The client utilizes the data type defined in IDL through a language mapping. This mapping defines the programming language constructs (data types, classes, etc.) that will be generated by the IDL compiler supplied by an ORB vendor.*”).
- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine teachings of Wong-Insley and Becker and further include compilers are provided for mapping the programming language onto the target

platform by the teachings of Hammond in order to utilize at run time with the assurance that there will be no interaction mismatches (col.3 lines 50-56).

Response to Arguments

Applicant's arguments filed on Nov. 2nd, 2007 have been fully considered but they are not persuasive.

▪ In the remarks, Applicant argues that:

(a) In regard to independent claims 21 and 29 applicant respectfully submits currently amended claims that cited prior art does not disclose or suggest.

Examiner's response:

Examiner disagrees.

(a) With respect to claims 21 and 29, examiner cited the different paragraphs of prior art of Wong-Insley and Becker for the currently amended claims. Please see details of this office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW


WEI ZHEN
SUPERVISORY PATENT EXAMINER